Release Notes
IFPS14
(News You Can Use)
May 20, 2003

2.0 Introduction

This section of the IFPS14 Release Notes highlights:

- Any special problems along with any existing work arounds
- Any FYI items associated with this Release

2.1 Phase II: Service Backkup

NOTE: Presently, Phase II: Service Backup **should only be attempted with another IFPS14 site** (i.e., Phase II**:** Service Backup is not presently backward compatible).

2.2 Known Problems and Workarounds

- **SPR4653 / FR1062**
  - **Title:** IFPS: IGR fails to display new zone after CWA change
  - **Description of Problem:** After adding a new zone to the CWA Change script, the new zone may fail to be displayed in IGR. Awarning message will pop up saying there is "missing information", and the log file will report "UGC ssZnnn in geography list but is not in border points file" (where ssZnnn=the new zone's UGC)..
  - **Work Around:** The zone is in fact in the borderpoints file that IGR uses (brdrpts_zone.ccc). Since intersite coordination is no longer part of IGR, the brdrpts_zone_local.ccc file may be used instead. The borderpoints file used by IGR is defined in the IGR_ccc file, found in the '/awips/adapt/ifps/Xdefaults directory. Modify the igr_ccc "borderptfile resource to point to the brdrpts_zone_local file.
  - **Reporting Site:** N/A

- **SPR5144 / FR1273**

- **Title:** IFPS: static local effects in ICS LE Selector should be blue, not cyan.
- **Description of Problem:** When running ICS, right click on a zone which has local effects, the LE Selector window pops up. Static local effects are cyan, but should be blue.
- **Workaround:** None
- **Reporting Site:** N/A

- **SPR5156 / FR1276**
  - **Title:** IFPS: ZFP formatter crashes when formatting snow levels
  - **Description of Problem:** The ZFP formatter fails with a Floating Point Exception (FPE). As a result, no snow phrases are produced. This only happens when snow level information is included within the matrices.
  - **Workaround:** TBD
  - **Reporting Site:** MDL

- **SPR5157 / FR1277**
  - **Title:** IFPS: QC fails to work within IGR
  - **Description of Problem:** The QC program does not work correctly within IGR for IFPS14.
  - **Workaround:** TBD
  - **Reporting Site:** MDL

- **SPR5159 / FR1042**
  - **Title:** IFPS: LX Failover indicates make_lx2_secondary.sh not found – but it is
  - **Description of Problem:** The LX Failover script (lx2->lx1) suggests that make_lx2_secondary.sh is not found The script continues to run and successfully switches the site back to lx1 primary. Some of the IFPS processes are left on lx2 (such as the servers and wrong crontab file).
  - **Workaround:** Manually cleanup the lx2 after failing back to lx1.
  - **Reporting Site:** MDL

- **SPR5161 / FR1278**
  - **Title:** IFPS: cleanup needs to source env file before calling rm_isc_send
  - **Description of Problem:** The rm_isc_send uses GFE_HOME which needs to be defined priori calling
  - **Workaround:** Manually remove isccfg.py and isccfg.py.svcbup, if they are identical. If not, mv isccfg.py.svcbup to isccfg.py.
  - **Reporting Site:** N/A

- **SPR5162 / FR1279**

- **Title:** IFPS: cleanup_svcbkup doesn't run from fix-it menu due to use of fopen() in master_menu
- **Description of Problem:** When cleanup script for service backup is run from fix-it menu, the localbin/ccc directory does not get removed. This is because master_menu checks for this file's existence by using fopen() and it doesn't close it until we close the master menu. This needs to be changed to use stat() or something similar. Also, the cleanup_svcbkup.bat file used by fix-it menu has some unnecessary logic that should be removed.
- **Workaround:** Run cleanup_svcbkup script manually OR use the master menu's exit button while in backup mode and Click "yes" when it asks you to cleanup service backup data.
- **Reporting Site:** NMTW

- **PR2936, PR2937,** and **PR2938** have been written against IFPS14. However, detailed information on these PRs is not currently available from the GFE Documentation web page. These PRs are related to GFE Configuration.
  - http://www-md.fsl.noaa.gov/eft/ifps14doc/onlinehelp/CHANGES_BUGS_FIXES_HIGHLIGHTS.html

2.3 CWA Change "Slash Code" Fix

The **CWA Change "Slash Code" Fix** information below is also online and available at:

- http://www.nws.noaa.gov/mdl/icwf/IFPS14/zncode_fix.html

CWA Change "Slash Code" Fix

Introduction

When changes occur to a WFO's area of responsibility, IFPS and WWA must be updated to recognize the changes. Whether the change is the addition of zones/counties, the removal of zones/counties, zones/counties moving from one WFO to another, or simply redrawing some zone/county boundaries, the change is typically made in IFPS/WWA via the CWA Change scripts.

The CWA Change script, accessable via the main IFPS Config GUI, updates several tables in the IFPS and WWA databases, then recreates maps that are used by such applications as WWA,

IGR, ICS, Georemapper, and config_geo. It was recently noticed that when the CWA Change scripts add a new zone to the geography_directry table in the IFPS database, there is a slight formatting error that can result in problems running the SAF formatter. It's currently expected that this only happens when adding a new zone for an adjacent office (not your own WFO), although that hasn't been confirmed yet.

This document will describe how to correct the formatting error in the geography_directry database table. The three basic steps are unloading the existing data, editing the data in the editor of your choice, then loading the corrected data back in the database.

If you have any questions, please contact the NCF/SST for assistance.

The zncode

First, a little background...

The geography_directry contains information such as the lat/lon, name, and ID of every public zone/county/fwx zone/marine zone/station/state/NWR tower in the local office's area of responsibility...plus those from neighboring WFOs. When new zones and counties are added to the geography_directry as part of the CWA Change process, each zone/county is assigned a "zone code" (more commonly known as a "slash code"). For zones, they look similar to /13 or /A65. For counties, they look similar to #13 or #A65. These slash codes are typically used in WRK products. Software then uses those codes to generate the headers in the final product, converting the slash codes to UGCs/FIPS and names.

The software expects that all zncodes for zones begin with a slash "/"...and that all zncodes for counties begin with a pound sign "#". When they don't begin with those characters, it's possible that the software could fail to recognize one or more zncodes. This may manifest itself in several ways, the most common of which is the failure to properly create an SAF product.

The Identification

The best way to identify and fix the erroneous zncodes is through the use of dbaccess. What follows are instructions on how to accomplish this.

- On ds1, log in as user awipsusr
- Type the following:
  - dbaccess ifps_ccc (where ccc=wfo ID)
  - [Q]uery Language
  - [N]ew
  - unload to "/tmp/zdir.unl" select * from geography_directry where zcs_id='Z' order

by zncode;
- unload to "/tmp/cdir.unl" select * from geography_directry where zcs_id='C' order by zncode;
- <esc>
- [R]un
- [E]xit, twice

- cd /tmp
- Using your favorite editor, edit /tmp/zdir.unl
- Look at the first few lines of the file. It should look similar to:

DCZ001|Z|/1|District of Columbia||District of Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|/2|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|/3|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

Pay attention to the third column (highlighted in RED above) -- that's the zncode.

If everything is fine at your office, you'll notice normal looking slash codes, as seen above. If the CWA Change scripts put erroneous zncodes in your database,
you'll see something similar to below:

DCZ001|Z|532|District of Columbia||District of Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|533|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|534|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

or

DCZ001|Z|^H736|District of Columbia||District of Columbia|EST5EDT|0|||||38.889999|77.019997|0|0|
MDZ002|Z|^H737|Allegany||Maryland|EST5EDT|0|||||39.580002|78.690002|0|0|
MDZ003|Z|^H738|Washington||Maryland|EST5EDT|0|||||39.52|77.720001|0|0|

The actual values aren't that important...you're looking for either a control character at the beginning of the zncode and/or the absence of a slash. If you see either of those types of entries, read on. Otherwise, you may skip to the **Cleanup** section.

The Fix

The erroneous zncodes must be changed to a normal slash code. Fortunately, all of the bad entries will be right at the top of your file, so you won't have to worry about overlooking any.

Typically, slash codes consist of a slash followed by 1-3 characters (e.g., /5 or /D10). The local office's slash codes will be /n (where n=a **unique** 1-3 digit number). Neighboring offices' slash

codes typically look like /Xn (where X=a letter; n=a **unique** number) The letter is usually WFO-specific (i.e., all zones belonging to a particular neighboring WFO use the same letter) or it's state-specific (i.e., all zones within a particular state use the same letter).

It is important to note that the zncodes:

- MUST begin with a slash for zones, pound sign for counties
- Are arbitrary
- MUST be unique

Since many pieces of software depend on matching the slash code to the UGC, two zones with the exact same slash code results in ambiguity. However what follows the slash (pound) may be any alphanumeric characters (1-3 in length).

- In "The Identification" section, the second and third examples are in error because the zncode has no slash code. The fix is to edit the zdir.unl file you unloaded from the database and make sure all erroneous entries begin with a slash **and** are unique. Since the file is ordered by zncode, it will make it easier to prevent duplicate zncodes.

When you're done with the zdir.unl file, repeat the edits for the cdir.unl file, this time making sure there are pound signs (#) instead of slashes in front of the zncodes.
In most cases there won't be any problems in the cdir.unl file, but it's best to check to be safe.

IMPORTANT -- Before the next step, make sure all instances of the IFPS and WWA are shut down. It will only take a couple of minutes to make the changes.

- On ds1, as user awipsusr
- Type the following:
  - dbaccess ifps_ccc (where ccc=wfo ID)
  - [Q]uery Language
  - [N]ew
  - delete from geography_directry where zcs_id='Z';
  - load from "/tmp/zdir.unl" insert into geography_directry;
  - <esc>
  - [R]un
  - [N]ew
  - delete from geography_directry where zcs_id='C';
  - load from "/tmp/cdir.unl" insert into geography_directry;
  - <esc>
  - [R]un
  - [N]ew

- delete from wyyyymmddcc where source='working'; (where yyyymmddcc = the current forecast cycle)
- <esc>
- [R]un
- [E]xit, twice

After performing the above SQL, your IFPS should be ready to create SAF products once again. No server restarts are required. Users are free to launch IFPS/WWA once again.

The Cleanup

Don't forget to clean up after yourself! Delete the two temporary files we created:

rm /tmp/zdir.unl /tmp/cdir.unl